

**Supplementary Table S3 Summary of regulated pathways in response to expressing EPSP synthase**

Locus	Locus Tag	Product Name	Fold <sup>a</sup>
<b>Shikimate pathway</b>			
<i>aroA</i>	b0908	5-enolpyruvylshikimate-3-phosphate synthetase	0.92 ± 0.12
<i>aroB</i>	b3389	3-dehydroquinate synthase	0.81 ± 0.12
<i>aroC</i>	b2329	chorismate synthase	0.86 ± 0.11
<i>aroD</i>	b1693	3-dehydroquinate dehydratase	0.82 ± 0.08
<i>aroE</i>	b3281	dehydroshikimate reductase	0.90 ± 0.10
<i>aroF</i>	b2601	3-deoxy-D-arabinoheptulosonate-7-phosphate synthase (DAHP synthetase, tyrosine repressible)	-1.15 ± 0.15
<i>aroG</i>	b0754	3-deoxy-D-arabinoheptulosonate-7-phosphate synthase (DAHP synthetase, phenylalanine repressible)	0.91 ± 0.09
<i>aroH</i>	b1704	3-deoxy-D-arabinoheptulosonate-7-phosphate synthase (DAHP synthetase, tryptophan repressible)	-1.06 ± 0.14
<i>aroK</i>	b3390	shikimate kinase I	0.91 ± 0.11
<i>aroL</i>	b0388	shikimate kinase II	0.93 ± 0.14
<i>aroM</i>	b0390	protein of <i>aro</i> operon, regulated by <i>aroR</i>	-1.14 ± 0.13
<i>aroP</i>	b0112	aromatic amino acid transport protein	0.87 ± 0.10
<i>ydiB</i>	b1692	putative oxidoreductase	-1.40 ± 0.17
<b>Aromatic acids biosynthesis</b>			
<i>tyrA</i>	b2600	chorismate mutase-T and prephenate dehydrogenase	0.99 ± 0.13
<i>tyrB</i>	b4054	tyrosine aminotransferase, tyrosine repressible	0.80 ± 0.09
<i>tyrP</i>	b1907	tyrosine-specific transport system	-1.28 ± 0.18
<i>tyrR</i>	b1323	transcriptional regulation of <i>aroF</i> , <i>aroG</i> , <i>tyrA</i> and aromatic amino acid transport	-1.08 ± 0.15
<i>tyrS</i>	b1637	tyrosine tRNA synthetase	-0.96 ± 0.13
<i>pheA</i>	b2599	chorismate mutase-P and prephenate dehydratase	-1.14 ± 0.16
<i>aspC</i>	b0928	aspartate aminotransferase	1.20 ± 0.17
<i>ilvE</i>	b3770	branched-chain amino-acid aminotransferase	1.32 ± 0.19
<i>trpA</i>	b1260	tryptophan synthase, alpha protein	-1.10 ± 0.15
<i>trpB</i>	b1261	tryptophan synthase, beta protein	-1.10 ± 0.14
<i>trpC</i>	b1262	N-(5-phosphoribosyl)anthranilate isomerase and indole-3-glycerolphosphate synthetase	-1.03 ± 0.09
<i>trpD</i>	b1263	anthranilate synthase component II, glutamine amidotransferase and phosphoribosylanthranilate transferase	-1.38 ± 0.18
<i>trpE</i>	b1264	anthranilate synthase component I	-1.20 ± 0.13
<i>trpL</i>	b1265	<i>trp</i> operon leader peptide	-1.08 ± 0.15
<i>trpR</i>	b4393	regulator for <i>trp</i> operon and <i>aroH</i> ; <i>trp</i> operon repressor	0.90 ± 0.07
<i>trpS</i>	b3384	tryptophan tRNA synthetase	0.99 ± 0.08
<b><i>tdc</i> operon</b>			
<i>dsdA</i>	b2366	D-serine dehydratase	-1.95 ± 0.25
<i>dsdC</i>	b3464	DNA-binding transcriptional dual regulator	-1.90 ± 0.12
<i>tdcR</i>	b3119	DNA-binding transcriptional activator	-2.89 ± 0.33

<i>tdcA</i>	b3118	DNA-binding activator	-2.12±0.29
<i>tdcB</i>	b3117	threonine dehydratase	-1.58±0.20
<i>tdcC</i>	b3116	threonine/serine transporter	-1.41±0.19
<i>tdcD</i>	b3115	propionate kinase	-1.41±0.18
<i>tdcE</i>	b3114	2-ketobutyrate formate-lyase/pyruvate formate-lyase 4, inactive	-3.26±0.30
<i>tdcF</i>	b3113	predicted enamine/imine deaminase	-1.02±0.15
<i>tdcG</i>	b3112	L-serine deaminase III	0.97±0.14
<b><i>sfm</i> operon</b>			
<i>sfmA</i>	b0530	predicted fimbrial-like adhesin protein	-1.88±0.27
<i>sfmC</i>	b0531	predicted pilin chaperone, periplasmic	-2.33±0.30
<i>sfmD</i>	b0532	putative outer membrane protein, export function	-1.76±0.19
<i>sfmF</i>	b0534	putative fimbrial-like adhesin protein	-1.81±0.26
<i>sfmH</i>	b0533	predicted fimbrial-like adhesin protein	-2.37±0.31
<i>fimZ</i>	b0535	transcriptional regulator	-2.18±0.30

<sup>a</sup> Changes in expression of genes were represented by mean expression ratios ( $P<0.05$ )